Ten Week Brood Observations
2004

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Abstract

Ten week brood observations are used as an index to productivity. For ruffed grouse, pheasant, and wild turkey, the number of broods counted per observer in 2004 decreased from 2003 levels. However, gray partridge broods counted per observer in 2004 increased from 2003 levels. Participation in the 2004 Ten Week Brood Survey increased 9% from the 2003 level.

Methods

An e-mail containing an electronic survey form was sent to all department field personnel. Field personnel were asked to record the number of ruffed grouse, pheasant, gray partridge, and wild turkey broods observed while doing normal field operations. The survey period began the second week in June and ended the third week of August, 2004. When one of the four species was observed with a brood, participants recorded the date, county of the observation, number of young in the brood, and whether all the young in the brood were counted. A summary form was e-mailed at the end of August to all field personnel. On the summary form, participants reported all brood observations, the percent of their time spent in the field, and whether they or others that worked for them collected the observations. These forms were returned to Wildlife Surveys and the data were entered into the DNR UNIX production server and summarized using the Statistical Analysis System (SAS).

Results

Two hundred and eighty four (284) observers sent back 217 surveys, reporting their observations of game broods of ruffed grouse, pheasant, gray partridge, and wild turkey in the summer of 2004. The number of observers increased from 2003 to 2004 by 9%, and the number of surveys returned by these observers increased by 3% from 2003.

Ruffed Grouse

The average number of ruffed grouse broods observed during the ten week period per field participant in 2004 was 0.58 (Fig. 1). Broods per observer decreased 38% from 2003 when 0.93 broods per observer were recorded. The average number of broods observed was below the long-term (1970-2003) mean of 1.39 broods per observer. The number of young observed per brood in 2004 was 4.2 compared to 4.5 in 2003, a decrease of 6.7%.

Pheasant

Pheasant observations in 2004 decreased to 0.44 broods per observer (Fig. 2). Broods per observer showed a decrease of 17% from 2003 when 0.53 broods per observer were recorded. The average number of broods per observer was just above the long-term (1970-2003) mean of 0.52. In 2004, average brood size observed was 5.0 compared to 5.4 in 2003, representing a decrease of 7.4%.

Gray Partridge

Gray partridge observations in 2004 decreased to 0.003 broods per observer (Fig 3). Only one gray partridge brood was observed over the ten-week period. The average number of broods observed was below the long-term (1980 - 2003) mean of 0.05. Average 2004 brood size was 6.0 compared to 3.0 in 2003, representing a 100% increase, although sample size only consists of one brood.

Wild Turkey

In 2004, the number of wild turkey broods per observer was 2.04 (Fig 4). Broods per observer decreased 27% from 2003 but was well above the long-term (1987-2003) mean of 1.19 broods per observer. The average 2004 brood size was 4.3 compared to 4.9 in 2003, a decrease of 12.2%.

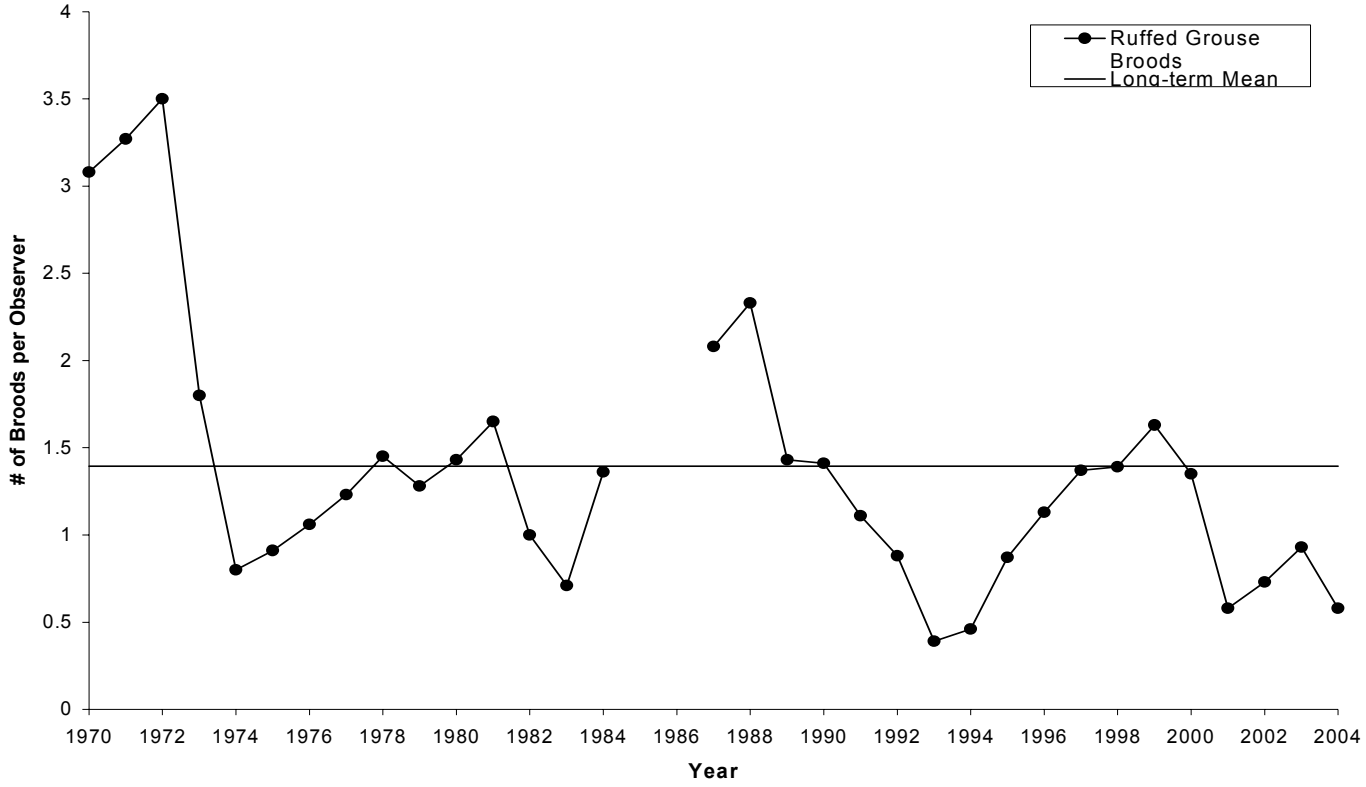

Figure1. *Number of ruffed grouse broods seen per observer 1970-2004.*

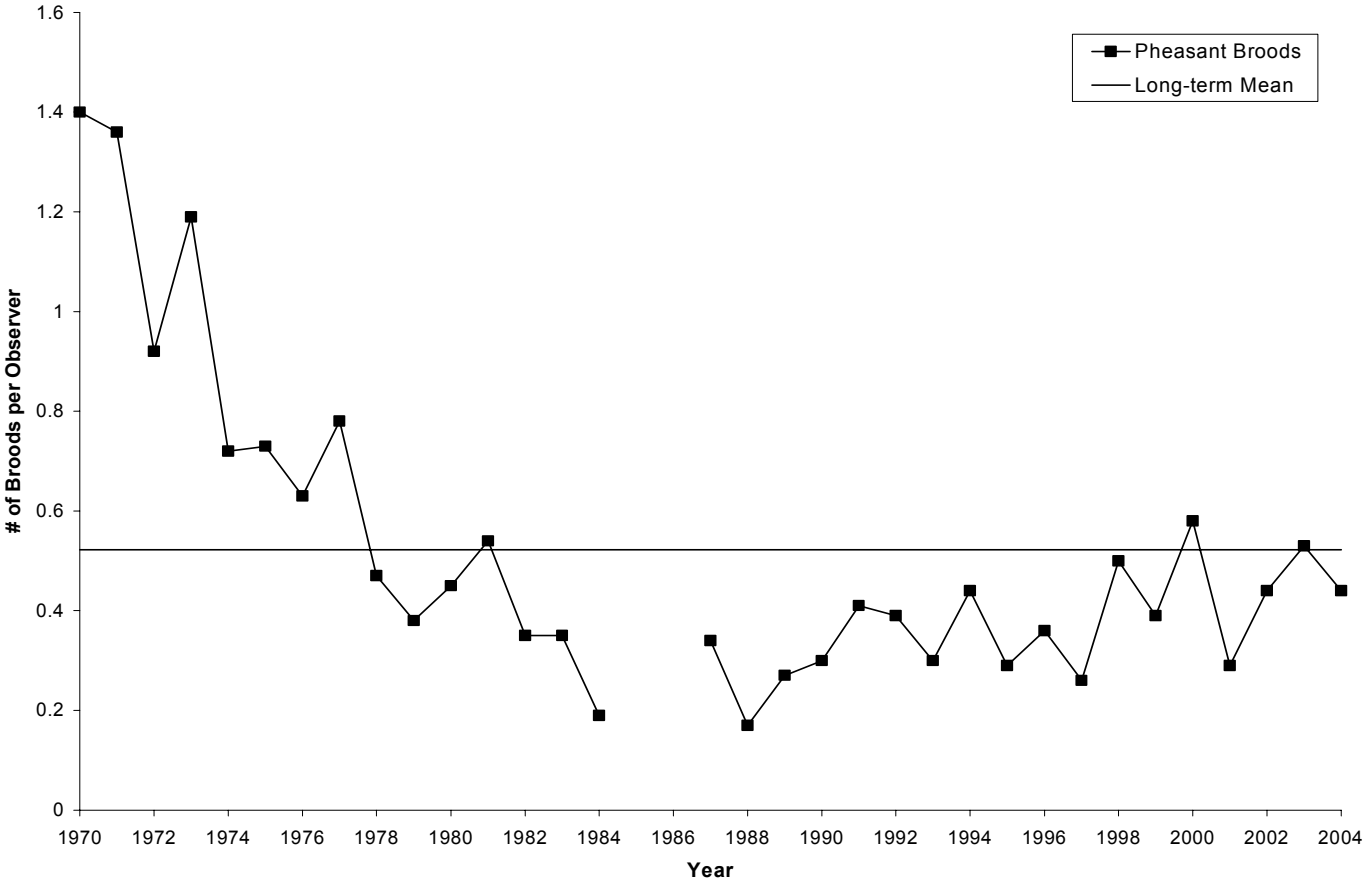

Figure 2. *Number of pheasant broods seen per observer 1970-2004.*

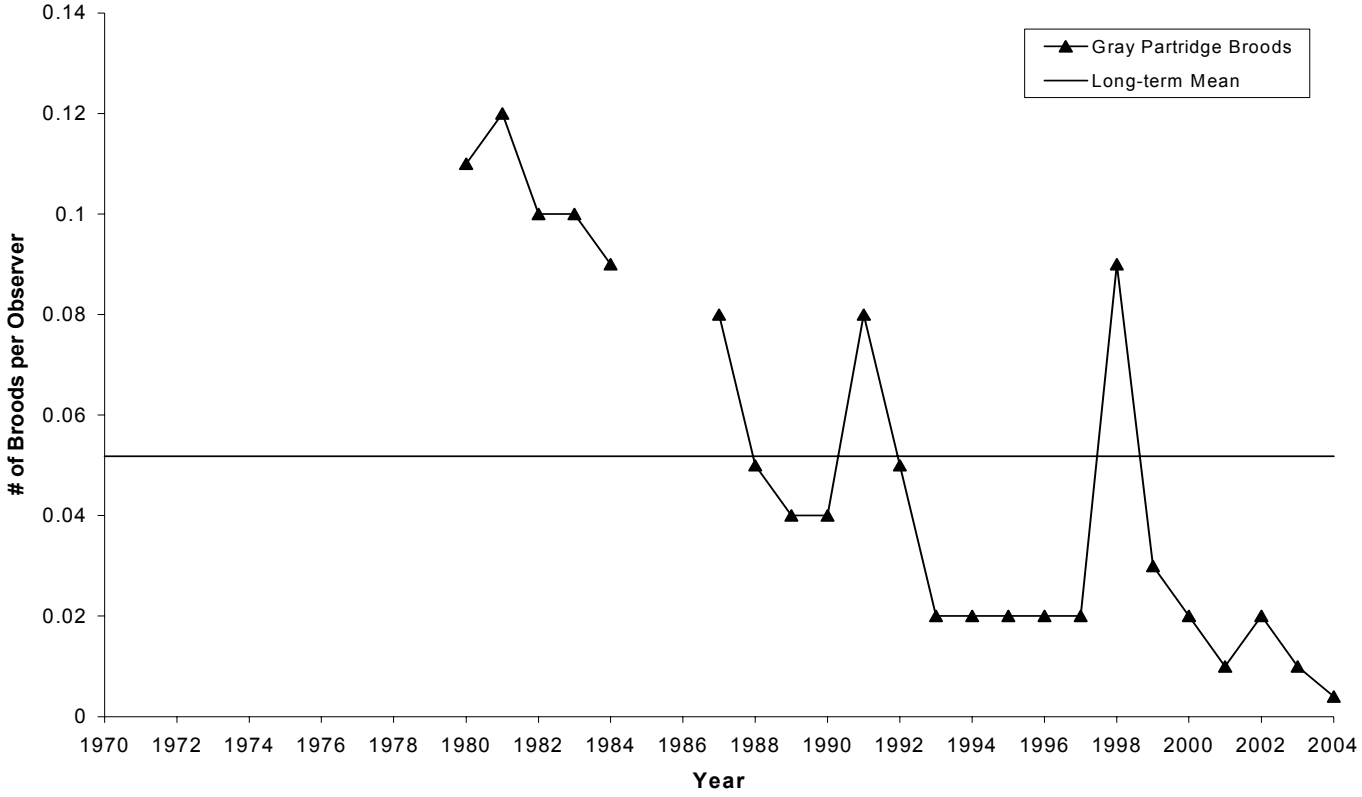

Figure 3. *Number of gray partridge broods per observer 1980-2004.*

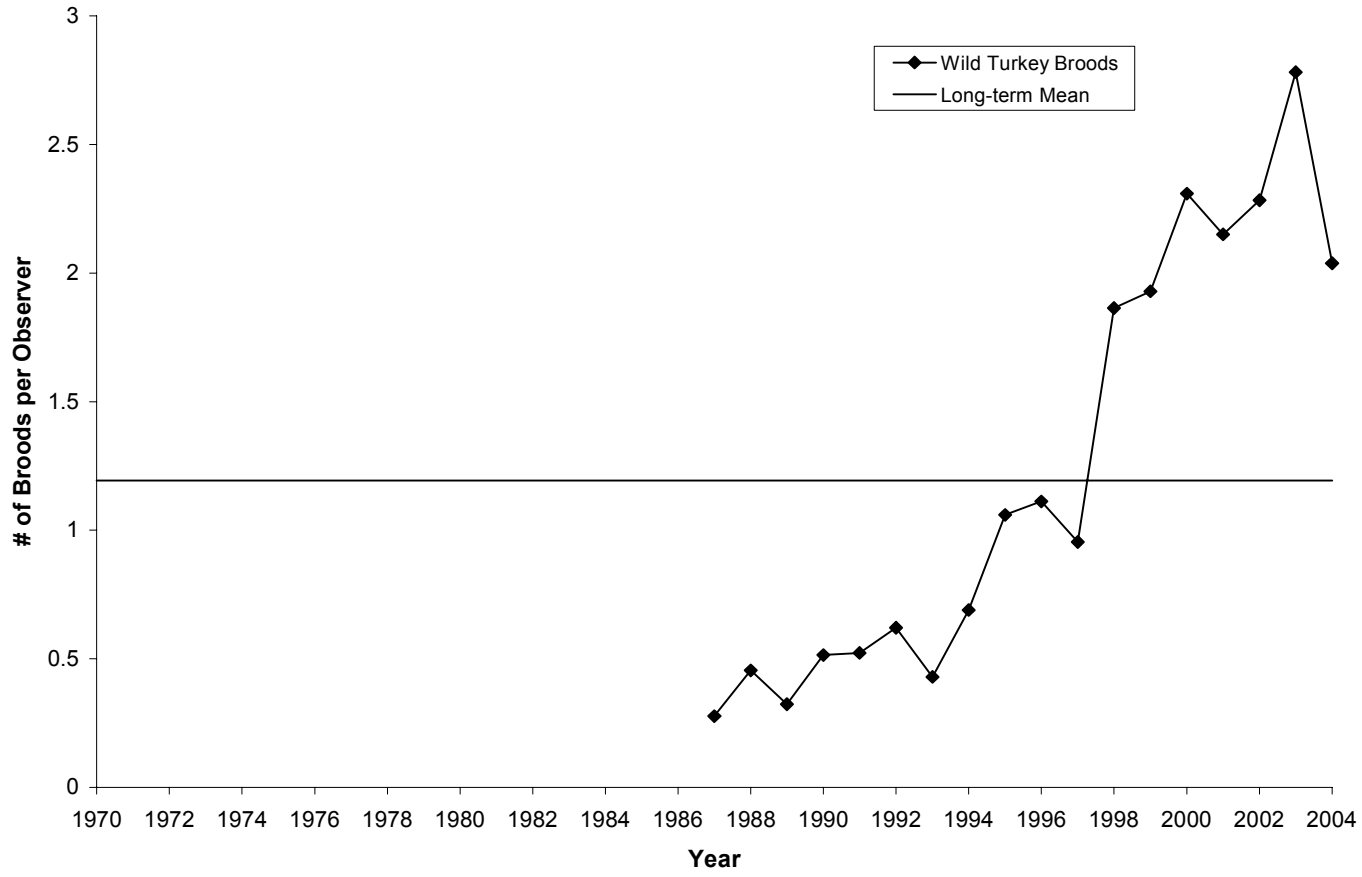

Figure 4. *Number of wild turkey broods seen per observer 1987-2004.*